

Patent Abstracts of Japan

PUBLICATION NUMBER

09275021

PUBLICATION DATE

21-10-97

APPLICATION DATE

04-04-96

APPLICATION NUMBER

08082770

APPLICANT: NKK CORP;

INVENTOR: NAMIKAWA MISAO;

INT.CL.

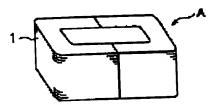
: H01F 27/245 C22C 38/00 C22C 38/02

H01F 1/16 H01F 27/33

TITLE

LOW NOISE IRON CORE EXCELLENT

IN MAGNETIC CHARACTERISTIC



ABSTRACT :

PROBLEM TO BE SOLVED: To provide a low noise iron core having an excellent core loss characteristic, low-noise as well, excellent in mass-producibility and producible at a low cost, and having an excellent magnetic characteristic by using non- oriented silicon steel strips having a specific absolute value of DC magnetostriction, and laminating them.

SOLUTION: An iron core A is composed of a laminated iron core formed by laminating a plurality of non-oriented silicon steel strips 1 punched into the shape of a cut core. Accordingly, noise is generated less compared with a wound iron core, since no resonance is generated. Besides, the Si content of the non-oriented silicon steel strips 1 is in a range of 4-7wt.%, to make the absolute value of the DC magnetostriction of the non-oriented silicon steel strips 1 to be used 1.5×10⁻⁶ or less. Consequently, it becomes possible to obtain a low noise iron core having an excellent soft magnetic characteristic. Since it is a cut core type laminated iron core by the use of non-oriented silicon steel strips 1 having an absolute value of DC magnetostriction of 1.5×10^{-6} or less, in this way, it becomes possible to make the best use of both the merit of the non-oriented silicon steel strips 1 and that of the laminated iron core.

COPYRIGHT: (C)1997,JPO